

CLAIMS

1. A method of manufacturing a semiconductor device sealed with silicone rubber, characterized by

1) placing an unsealed semiconductor device into a mold,

2) thereafter filling in spaces between the mold and the semiconductor device with a sealing silicone rubber composition, and

3) subjecting the composition to compression molding.

2. The method of Claim 1, wherein the mold comprises an upper mold and a lower mold, step 1) is performed by placing the unsealed semiconductor device into the lower mold, step 2) is performed by filling the spaces between the upper mold and the semiconductor device, and the unsealed semiconductor device is clamped between the upper mold and the lower mold after step 2) and before step 3).

3. The method of Claim 1, wherein said silicone rubber composition is a hydrosilylation reaction-curable silicone rubber composition.

4. The method of Claim 1, wherein said silicone rubber composition can be cured into a silicone rubber having a complex elastic modulus of 1 GPa or less.

5. The method of Claim 1, wherein at least two unsealed semiconductor devices are sealed with the use of said silicone rubber, and then the sealed semiconductor devices are separated by cutting into individual sealed semiconductor devices.

6. The method of Claim 1, wherein said unsealed semiconductor device comprises semiconductor chips on a printed-circuit board electrically interconnected via bonding wires.

7. The method of Claim 6, wherein said silicone rubber composition is supplied to the semiconductor chips on the printed-circuit board, and the connections between semiconductor chips and the bonding wires are sealed with the silicone rubber.

8. The method of Claim 1, wherein inner surfaces of the mold are covered with an attached release film.

9. The method of Claim 8, wherein said release film is attached to the inner surfaces of the mold by air suction.

10. A sealed semiconductor device produced by a method according to any of Claims 1

through 9.